



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/420,918	10/20/1999	DAVID E. ROSENSTEIN	COVDP001	3432

23689 7590 08/14/2003

Jung-hua Kuo
Attorney At Law
PO Box 3275
Los Altos, CA 94024

EXAMINER

JUNTIMA, NITTAYA

ART UNIT	PAPER NUMBER
----------	--------------

2663

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/420,918

Applicant(s)

ROSENSTEIN ET AL.

Examiner

Nittaya Juntima

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12, 15-19, and 21-24 is/are rejected.
- 7) ☒ Claim(s) 4, 13, 14 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed on June 3, 2003.
2. The objections to specification and claims are withdrawn in view of applicant's amendment.
3. Claims 17-19 and 21-22 are rejected under 35 U.S.C. 102.
4. Claims 1-3, 5-12, 15-16, and 23-24 are rejected under 35 U.S.C. 103 (a).
5. Claims 4, 13-14, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Drawings

6. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

7. Claims 5 and 6 are objected to because of the following informalities:
 - in claim 5, line 3, "the group" should be changed to "a group" and "xDSL" should be spelled out to avoid any confusion over its meaning; and

- in claim 6, "ADSL, SDSL, VDSL, HDSL, and RADSL" should each be spelled out to avoid any confusion over their meanings.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. **Claims 17-19 and 21-22** are rejected under 35 U.S.C. 102(e) as being anticipated by Gardell et al. (USPN 6,298,062 B1).

Per **claim 17**, as shown in Fig. 2, Gardell et al. teach a derived voice over data packet network comprising *a derived voice over data termination device (gateway 32) located in a wire center* (a central office of the PSTN, col. 6, lines 44-46) *and coupled to a client premise* (where devices on the PSTN are located) *over a single metal wire pair* (a connection connecting a

Art Unit: 2663

telephone 26 at the client premise to a central office is inherently a single metal wire pair), and *a derived voice over data switch* (router 34) *coupled to the derived voice over data termination device* (gateway 32) *and to a public switched telephone network* (router 34 is coupled to router 34 and to the PSTN 22 via gateway 32) (see also col. 6, lines 28-46).

Per **claim 18**, as shown in Fig. 2, Gardell et al. teach *a derived voice over data switch* (router 34) *is coupled to the PSTN via a voice gateway* (H.323 gateway residing in the gateway 32) *and a voice switch* (a voice switch is inherently residing in the PSTN 22).

Per **claim 19**, as shown in Fig. 2, Gardell et al. teach *a regional switching center which includes the derived voice over data switch* (it is inherent that a regional switching center is part of the PSTN, and because the regional switching center must include/serve a central office and the gateway 32 is located in the central office as mentioned in col. 6, lines 44-46, therefore, it is also inherent that the regional switching center includes the gateway 32).

Per **claim 21**, as shown in Fig. 2, Gardell et al. teach a method for providing base band voice telephony to a client telephone comprising *providing a derived voice over data termination device* (gateway 32) *in a wire center* (central office of the PSTN, col. 6, lines 44-46), *providing a base band analog connection* (a connection connecting between a telephone 26 at the client premise where devices on the PSTN are located and the central office is inherently a base band analog connection) *between the client telephone* (telephone 26) *and the derived voice over data termination device* (gateway 32), *transmitting base band analog voice signals between the client telephone* (telephone 26) *and the derived voice over data termination device* (gateway 32) *in the wire center* (central office of the PSTN) (col. 4, lines 8-25 and col.6, lines 28-46) and *transmitting derived voice over data signals between the derived voice over data*

termination device (gateway 32) *and a voice gateway* (H.323 gateway residing in the gateway 32) *to a public switched telephone network* (PSTN 22) (col. 4, lines 8-25 and col.6, lines 28-46).

Per **claim 22**, as shown in Fig. 2 of Gardell et al., it is inherent that the connection connecting between the client telephone (26) and the central office of the PSTN where the derived voice over data termination device (gateway 32) is located (col. 6, lines 44-46) is over a single metal wire pair such as a twisted pair of copper wires.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 1-3, 5-12, and 15-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bossemeyer, Jr. et al. (USPN 6,335,936 B1) in view of Gardell et al. (USPN 6,298,062 B1).

Per **claim 1**, as shown in Fig. 1, Bossemeyer, Jr. et al. teach *a connection* (a subscriber loop 12) *between the client premise* (a telephone subscriber 10) and the central office (20) *wherein the connection carries analog frequencies* (analog telephone line carries analog frequencies) (col. 2, lines 55-58).

However, Bossemeyer, Jr. et al. fail to teach a derived voice data termination device locating outside of the client premise and connecting it to the connection.

As shown in Fig. 2, Gardell et al. teach *a derived voice over data termination device* (gateway 32) *located outside of the client premise* (housed in a central office of the PSTN and

Art Unit: 2663

connected to telephone 26 via an analog line, see also col. 6, lines 32-34 and 44-46) and ***configured to convert between base band signals and derived voice over data signals utilizing derived voice over data technology*** (col. 4, lines 8-25 and col. 6, lines 28-46).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate a derived voice over data termination device of Gardell et al. into the system of Bossemeyer, Jr. et al. by collocating the derived voice over data termination device in the central office and connecting it to the connection to the client premise as suggested by Gardell et al. (col. 6, lines 44-46 and Fig. 2) to provide subscribers with a voice over data calling option for cost savings purposes as well known in the art.

Per **claim 2**, since the derived voice over data termination device (gateway 32 in Fig. 2 of Gardell et al.) is located in the central office, therefore, powered by the central office, and connected to the connection to the client premise in the combined system of Bossemeyer, Jr. et al. and Gardell et al. presents a constant source of line voltage, typically 48 volts, it is inherent that the connection to the client premise is powered by the derived voice over data termination device.

Per **claim 3**, it is clear that ***the connection*** (Bossemeyer, Jr. et al., a subscriber loop 12, Fig. 2, col. 54-58) of the combined system of Bossemeyer, Jr. et al. and Gardell et al. ***between the client premise*** (a telephone subscriber 10, Fig. 2, col. 2, lines 54-58) ***and the derived voice over data termination device*** (Gardell et al, gateway 32, Fig. 2, col. 6, lines 28-46) ***is over a single metal wire pair*** (Bossemeyer, Jr. et al., a twisted pair of copper wires, col. 2, lines 54-58).

Per **claim 5**, as shown in Fig. 2, Bossemeyer, Jr. et al. teach ***a digital subscriber line access multiplexer*** (DSLAM 24) (col. 3, lines 62-col. 4, lines 1-6). However, Bossemeyer, Jr. et

al. fail to teach connecting the DSLAM to the derived voice over data termination device via a port selected from the group consisting of xDSL, DS1, DS3, OC-3, OC-12, Ethernet, E3, E1, and OC-48.

As shown in Fig. 2, Gardell et al. teach the derived voice over data termination device (gateway 32 with H.323 gateway located in the central office of the PSTN is connected to the PSTN, col. 6, lines 28-46, see also col. 4, lines 4-26).

Given the teaching of Gardell et al., it would have been obvious to one skilled in the art to modify the connection of the DSLAM of Bossemeyer, Jr. et al. by connecting the derived voice over data termination device connected to the PSTN to at least one port of the DSLAM of Bossemeyer, Jr. et al. so that the data traffic carrying voice outputted from the DSLAM can be converted to voice signals by the derived voice over data termination device for further transmission on the PSTN as taught by Gardell et al. (col. 4, lines 8-26).

Further, Bossemeyer, Jr. et al. teach that the DSLAM also supports different topologies of network 40 and supports various port rates such as OC-3, DS-1, and higher rates such as OC-12 (col. 3, lines 65-col. 4, lines 1-4). Therefore, it would have been obvious to one skilled in the art to include xDSL (different flavors of DSL), Ethernet, E3, E1, and OC48 into a group of ports supported by the DSLAM to accommodate different transmission rate requirements and network topologies.

Per **claim 6**, although Bossemeyer, Jr. et al. teach ADSL (col. 3, lines 23-44), but fail to explicitly teach that xDSL includes SDSL, VDSL, HDSL, and RADSL, it would have been obvious to one skilled in the art to include ADSL, SDSL, VDSL, HDSL, and RADSL into xDSL

as they are different schemes of digital subscriber lines which are available today for providing high-speed digital transmissions to the subscribers over twisted-pair facility.

Per **claim 7**, Bossemeyer, Jr. et al. fail to teach that the derived voice over data termination device is selected from the group consisting of voice over ATM, voice over data network, voice over IP, and voice over frame relay termination devices. However, Gardell et al. teach that the derived voice over data termination device (the gateway 32 in Fig. 1) comprises a voice over IP H.323 gateway (col. 4, lines 8-25 and col. 6, lines 34-38). Therefore, it is inherent that the derived voice over data termination is selected from the group consisting of voice over ATM, voice over data network, voice over IP, and voice over frame relay termination devices.

Per **claim 8**, Bossemeyer, Jr. et al. fail to teach that the derived voice over data termination device is located in a wire center. Gardell et al. teach that *the derived voice over data termination device* (gateway 32 in Fig. 2) *is located in a wire center* (a central office of PSTN, col. 6, lines 44-46).

Per **claim 9**, Bossemeyer, Jr. et al. fail to teach that the derived voice over data termination device is configured to receive and generate from base band voice signals packetized digital voice data. However, Gardell et al. teach that *the derived voice over data termination device* (gateway 32 in Fig. 2) *is configured to receive and generate from base band voice signals packetized digital voice data* (col. 6, lines 34-38, see also col. 4, lines 8-26).

Per **claim 10**, Bossemeyer, Jr. et al. teach that the customer premise equipment (CPE such as telephone 52 and a PC 60) as shown in Fig. 3 is coupled to a connection (the subscriber loop 12) (col. 4, lines 20-33). Gardell et al. teach *the derived voice over data termination device* (gateway 32 in Fig. 2) is also coupled to customer premise equipment (devices on the PSTN) via

Art Unit: 2663

a connection. Therefore, it is inherent in the combined system of Bossemeyer, Jr. et al. and Gardell et al., the customer equipment is coupled to the connection between the client premise and the derived voice over data termination device.

Per **claim 11**, Bossemeyer, Jr. et al. teach that *the customer premise equipment* (CPE such as telephone 52 and a PC 60) as shown in Fig. 3 is configured to receive base band voice signals and digital data signals (telephone 52 is configured to receive base band voice signals and a PC 60 is configured to receive digital data signals).

Per **claim 12**, Bossemeyer, Jr. et al. teach that a connection (subscriber loop 12) from the client premise (telephone subscriber 10) to the central office (20) carries both base band voice signals and digital data signals (Figs. 2-3, col. 4, lines 20-33), but fails to teach the derived voice over data termination device. As shown in Fig. 2, Gardell et al. teach the derived voice over data termination device locating in the central office and connecting to customer premise where devices on the PSTN are located (col. 6, lines 28-46). Therefore, in the combined system of Bossemeyer, Jr. et al. and Gardell et al., the connection between the client premise and the derived voice over data termination device carries both base band voice signal and digital data signals.

Per **claim 15**, as shown in Fig. 2, Bossemeyer, Jr. et al. teach that a connection (subscriber loop 12) from the client premise (telephone subscriber 10) to the central office (20) includes *a main distribution frame* (MDF 26) (subscriber loop 12 is terminated at the MDF, col. 3, lines 48-64). However, Bossemeyer, Jr. et al. do not teach the derived voice over data termination device coupled to the connection and the MDF. As shown in Fig. 2, Gardell et al. teach *the derived voice over data termination device* (gateway 32 comprises H.323 gateway, col.

Art Unit: 2663

4, lines 8-26) located in a central office of the PSTN, and connected to the PSTN (22) and to a connection to a customer premise where devices on the PSTN are located (col. 6, lines 28-46). Therefore, in the combined system of Bossemeyer, Jr. et al. and Gardell et al., it would have been obvious to one skilled in the art to connect the connection of Bossemeyer, Jr. et al. which includes a MDF to the derived voice over data termination device (gateway 32) of Gardell et al. such that the MDF is coupled between the derived voice over data termination and the client premise so that the digital data traffic carrying voice can be terminated onto the derived voice over data termination device (gateway 32) of Gardell et al. for signal conversion and PSTN termination as taught by Gardell et al. (col. 4, lines 8-26).

Per **claim 16**, Bossemeyer, Jr. et al. fail to teach that the derived voice over data termination device. As shown in Fig. 2, Gardell et al. teach that the derived voice over data termination device (gateway 32) is a voice over data termination device configured to support transmission to a switch (a router 34), but fail to explicitly teach that the derived voice over data termination device is also configured to support transmission utilizing xDSL, DS1, DS3, OC-3, OC-12, Ethernet, E3, E1, and OC48. However, it is well known that the derived voice over data termination device such as a gateway 32 of Gardell et al. can be easily configured to support various transmission rates/types such as xDSL, DS1, DS3, OC-3, OC-12, Ethernet, E3, E1, and OC48 through different physical port and network configurations.

12. **Claims 23 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardell et al. (USPN 6,298,062 B1) in view of Bossemeyer, Jr. et al. (USPN 6,335,936 B1).

Per **claim 23**, as shown in Fig. 2, Gardell et al. teach the base band analog connection (a connection connecting between telephone 26 and the central office of the PSTN where gateway

Art Unit: 2663

32 is located, col. 6, lines 44-46) between the client telephone (26) and the derived voice over data termination device (gateway 32), but fail to teach a splitter and transmitting digital data signals between a client premise equipment and the splitter over the single metal wire pair.

However, as shown in Fig. 2, Bossemeyer, Jr. et al. teach a splitter (28) which separates voice frequency from digital data signals (col. 3, lines 51-57 and col. 4, lines 36-40) and transmitting digital signals between a client premise equipment (CPE in Fig. 3, col. 4, lines 27-33) and the splitter (28) over a single metal wire pair (subscriber loop 12, col. 3, lines 48-51, see also col. 3, lines 31-32).

Given the teaching of Bossemeyer, Jr. et al. in a case where the base band analog connection of Gardell et al. is a subscriber loop as taught by Bossemeyer, Jr. et al. and the splitter of Bossemeyer, Jr. et al. is also located in the central office same as the derived voice over data termination device of Gardell et al., it would have been obvious to one skilled in the art to terminate the base band analog connection of Gardell et al. on the splitter (28) so that the voice frequency signal from the client telephone (26) of Gardell et al. can be converted to VoIP via the derived voice over data termination device (gateway 32) of Gardell et al. for further transmission, and to transmit digital signals between a client premise equipment (CPE such as a PC 60 in Fig. 3, col. 4, lines 27-33) and the splitter (28) over the single metal wire pair (the connection in claim 22) of Gardell et al. so that the digital signals can be carried to the central office for further transmission to an appropriate data network as known in the art.

Per **claim 24**, Gardell et al. fail to teach transmitting digital data signals between the splitter and a digital subscriber line access multiplexer. However, Bossemeyer, Jr. et al. teach

Art Unit: 2663

transmitting digital data signals between the splitter (28) and a digital subscriber line access multiplexer (DSLAM 24) (Fig. 2 and col. 3, lines 51-64).

Response to Arguments

13. Applicant's arguments with respect to claims 1-3, 5-12, 15-19, 21-24 have been considered but they are not persuasive.

a) In the remarks, per claim 1, Applicants disagree that simply because the cited references disclose the various components of the recited system of independent claim 1 does not mean that the combined references disclose or even suggest the configuration of those components as recited in claim 1. It is the provision of a derived voice over data termination device outside of the client premise that provides analog voice telephony and thus the use of a conventional analog telephone in the client premise while using derived voice over data technology beyond the termination device.

In response, the recitation "using derived voice over data technology to provide analog voice telephony to a client premise" in the preamble or the purpose of using a derived voice over data termination device outside of the client premise as argued by the Applicants above has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

b) In the remarks, Applicants disagree that in Gardell, the gateway 32 communicates on one hand with the client premise via a digital (packet switched) connection and on the other hand with the PSTN via an analog (circuit switched) connection... The Examiner suggests that it would have been obvious to connect Gardell's gateway collocated in the central office to an analog connection to the client premise. However, such a modification would simply not make technical sense nor would it result in the intended purpose suggested by the Examiner. Specifically, connecting the gateway 32 to the client premise via the circuit switched (analog) connection would result in the gateway 32 converting the circuit switched (analog) signals to packet switched (digital) signals. But signal conversion of the circuit switched connection with the client premise is neither necessary nor desirable as the gateway is connected to the PSTN (circuit switched). In other words, one would connect the client premise directly to the PSTN as both are circuit switched nodes.

In response, note that Gardell et al. teach *a derived voice over data termination device (gateway 32) located outside of the client premise* (housed in a central office of the PSTN and connected to telephone 26 via an analog line, see also col. 6, lines 32-34 and 44-46) and *configured to convert between base band signals and derived voice over data signals utilizing derived voice over data technology* (col. 4, lines 8-25 and col. 6, lines 28-46). In other words, the gateway of Gardell et al. in Fig. 2 communicates with client premise via an analog line, with PSTN 22, and with a packet based network via router 34, and it also performs the signal conversion. Therefore, the gateway 32 will convert the voice base band signals over an analog line connected to telephone 26 of the client premise into digital signals and pass them on to the packet based network via router 34 for destination termination as known in the art. Thus, it

Art Unit: 2663

would make technical sense and result in the intended purpose of providing subscribers with a voice over data calling option for cost savings purposes as well known in the art by collocating the gateway in the central office and connecting it to the connection to the client premise as suggested by Gardell et al. (col. 6, lines 44-46 and Fig. 2).

c) In the remarks, the Applicants further submit that there is a lack of motivation to combine the references... The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination or modification.

In response to Applicants' argument that there is no suggestion to combine the references, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Gardell et al. teach that *a derived voice over data termination device* (gateway 32) may be alternatively housed in a central office of the PSTN (see specifically col. 6, lines 44-46) which is the same location as where the *connection* (a subscriber loop 12, Fig. 2) of Bossemeyer, Jr. et al. is terminated, therefore, the combination of the two references, i.e. Gardell et al. and Bossemeyer, Jr. et al., would have been obvious. Further, the location of the gateway together with its signal conversion capabilities would have made it obvious to one skilled in the

art to provide subscribers with a voice over data calling option for cost savings purposes which are the well known benefit of VoIP transmission.

d) As explained in parts a), b), and c) above, the rejections of claims 1-3, 7-12, and 15-16 are therefore maintained.

e) In the remarks, per claim 17, Applicants argue as noted by the Examiner, Gardell does not teach a derived voice over data switch coupled to the PSTN....Bossemeyer teaches a PSTN connected to a wire center. The Examiner concludes that it would have been obvious to incorporate a PSTN into the network of Gardell for termination of the traditional voice call in the PSTN.

In response, as shown in Fig. 2, Gardell et al. teach a derived voice over data packet network comprising ***a derived voice over data termination device*** (gateway 32) ***located in a wire center*** (central office of the PSTN, col. 6, lines 44-46) ***and coupled to a client premise*** (where devices on the PSTN are located) ***over a single metal wire pair*** (a connection connecting a telephone 26 at the client premise to the central office is inherently a single metal wire pair), and ***a derived voice over data switch*** (router 34) ***coupled to the derived voice over data termination device*** (gateway 32) ***and to a public switched telephone network*** (router 34 is coupled to the PSTN 22 via gateway 32) (see also col. 6, lines 28-46). Therefore, the rejections of claims 17-19 are maintained.

f) In the remarks, per claim 21, Applicants argue that the connection between the telephone 26 and the gateway 32 is via the PSTN and thus is not entirely a base band analog connection. While the signals may be base band analog on the terminating ends of the PSTN, the connection through the PSTN is not. In contrast, claim 21 recites that the connection between the telephone

Art Unit: 2663

and the termination device is a base band analog connection. Thus, Gardell does not disclose such a connection. Claim 21 also recites transmitting base band analog voice signals between the telephone and the termination device. Again, contrary to the Examiner's assertions, Gardell does not disclose such a transmission as the PSTN employ digital signaling over fiber optics.

In response, since Gardell et al. teach that the gateway 32 may be alternatively located in a central office of PSTN (col. 6, lines 44-46) and the PSTN devices are also connected to the gateway (col. 6, lines 28-34), therefore, it is inherent that a connection connecting between a telephone 26 at the client premise where devices on the PSTN are located and the central office is a base band analog connection.

g) In the remarks, Applicants further argue that claim 21 also recites transmitting base band analog voice signals between the telephone and the termination device. Again, contrary to the Examiner's assertions, Gardell does not disclose such a transmission as the PSTN employ digital signaling over fiber optics. Claim 21 recites transmitting derived voice over data signals between the termination device and a voice gateway connection to a PSTN. The Examiner relies on the secondary reference of Dunn to conclude that it would have obvious to incorporate transmitting derived voice over data signals and a voice gateway into Gardell to enable the client to place voice calls over data network....Regardless, even if the references were combined, the resulting system would not read on claim 21 as the references fail to disclose several elements of claim 21, as discussed above.

In response, as shown in Fig. 2, Gardell et al. teach ***transmitting base band analog voice signals between the client telephone*** (telephone 26) ***and the derived voice over data termination device*** (gateway 32) ***in the wire center*** (central office of the PSTN) (col. 4, lines 8-25 and col.6,

lines 28-46) and *transmitting derived voice over data signals between the derived voice over data termination device* (gateway 32) *and a voice gateway* (H.323 gateway residing in the gateway 32) *to a public switched telephone network* (PSTN 22) (col. 4, lines 8-25 and col.6, lines 28-46).

h) With regards to the explanations provided in parts f) and g) above, the rejections of claims 21-24 are therefore maintained.

i) Applicant's arguments, with respect to claim 4 has been fully considered and are persuasive. Claim 20 also recites similar limitation as claim 4, i.e. a digital subscriber line access multiplexer coupled between the derived voice over data termination device and the derived voice over data switch. Therefore, the rejections of claims 4 and 20 have been withdrawn.

j) Claims 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The rejections of claims 13 and 14 have been withdrawn.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 703-306-4821. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2663

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Nittaya Juntima
August 13, 2003

NJ



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600